

**Amendments to the claims:**

This listing of claims will replace all prior versions and listings of claims in the application.

**Listing of Claims:**

1-12. (*cancelled*)

13. (*currently amended*) A method for the detection of thyroid stimulating hormone (TSH) receptor autoantibodies in a biological sample comprising:

- a) contacting said biological sample with TSH receptor (TSH<sub>r</sub>) that is immobilized on a solid support in the presence of labeled ~~affinity purified~~ polyclonal human autoantibodies against the TSH receptor that have been affinity purified using TSH<sub>r</sub> for a time sufficient for the autoantibodies in the biological sample to competitively bind to the TSH receptor;
- b) removing unbound labeled TSH receptor autoantibodies; and
- c) detecting TSH receptor autoantibodies in the biological sample by measuring the amount of label bound to the TSH receptor.

14. (*previously presented*) The method of claim 13, wherein the affinity-purified polyclonal human autoantibodies against the TSH receptor are purified to biochemical homogeneity and have a specific activity of at least 1 IU/mg of protein.

15. (*previously presented*) The method of claim 13, wherein the affinity-purified polyclonal human autoantibodies against the TSH receptor are obtained by purification by affinity chromatography, from a pool of sera of Graves' disease patients, wherein said autoantibodies are bound to an affinity material having a functional human recombinant TSH receptor bound thereto, washed to remove unbound autoantibodies and then eluted from the affinity material.

16. (*previously presented*) The method of claim 13, wherein said affinity-purified polyclonal human autoantibodies against the TSH receptor are labeled with a radioisotope, a chemiluminescent label or a fluorescent label.

17. (*previously presented*) The method of claim 16, wherein said affinity-purified polyclonal human autoantibodies against the TSH receptor are directly or indirectly labeled.